



Submission to the National Commission of Audit
from the
Australian Strategic Policy Institute (ASPI)
Submission One: Defence

Overview

This submission addresses the National Commission of Audit's terms of reference in the area of defence.

The Constitution makes national defence the exclusive (and sole explicit) responsibility of the Australian Government. Moreover, unlike health, education and welfare, citizens cannot turn to the private sector to remedy a shortfall in government provision of the public good of a secure nation. Defence is and should remain the responsibility of the Australian Government.

Australia's defence relies on a great many things—from astute diplomacy to wise strategy—but the vast bulk of costs come from the activities of the Department of Defence (Defence), which includes the Australian Defence Force (ADF).

The remainder of this submission deals with, in turn; the economics of defence capability, fiscal impact of defence spending, defence planning, defence efficiency in terms of both producing the requisite capabilities at least cost (productive efficiency) and having the right military capabilities (allocative efficiency), and the challenge of reforming Defence.

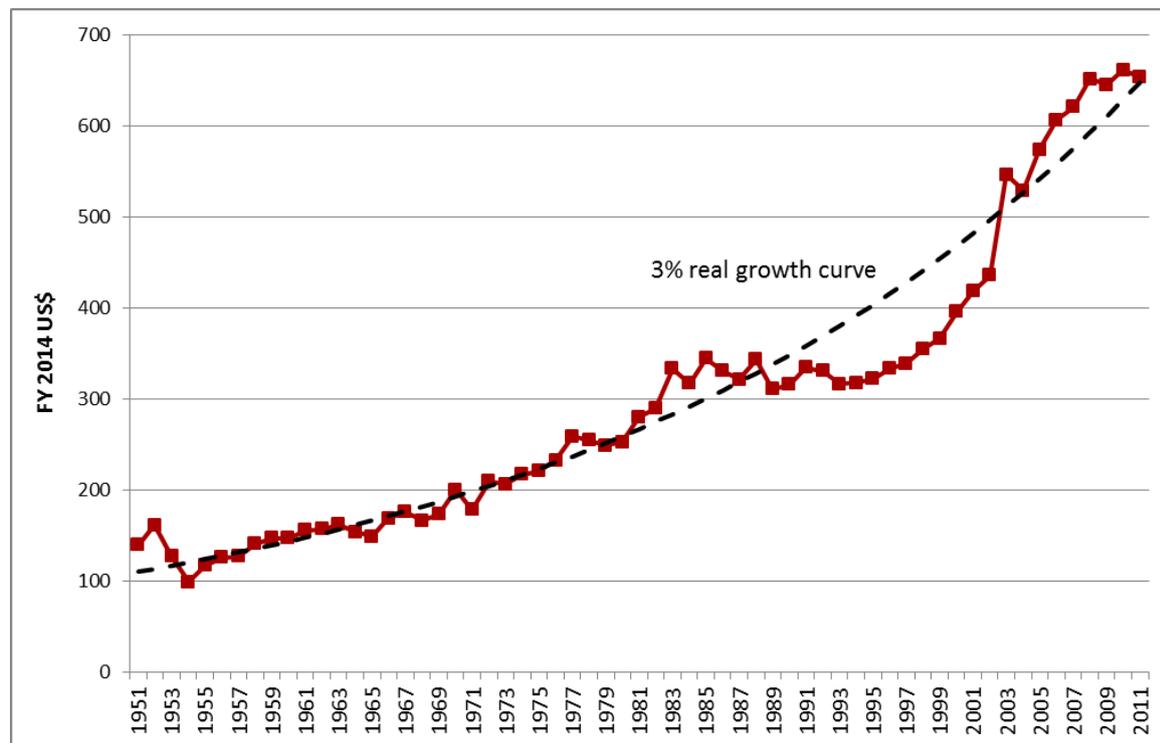
The economics of defence capability

The long-term cost of developing and maintaining up-to-date military capabilities (including the cost of equipment, maintenance, consumables, personnel etc.) has consistently outpaced inflation. As an example, Figure 1 plots the average annual cost per active duty vessel in the US Navy from 1951 to 2011. Similar results hold for other components of the US military.

Estimates vary upon source and country, but growth rates in the range of 2% to 3% per annum above retail inflation are typical for advanced militaries. A key component of the growth comes from the rising unit cost of acquiring military equipment, for which unit costs trend in real terms by 3% to 4% p.a.

Because defence budgets in most Western countries have not historically grown as rapidly as the cost of capability, defence forces have gotten smaller over time. In the United States, for example, the number of active duty vessels in the USN declined from 896 to 226 between the 1950s to the 2000s, while the number of combat aircraft in the US Air Force fell from 18,200 to 4,260 over the same period. Note that the decline occurred throughout the Cold War and is not a result of the 1990s peace dividend.

Australia has only managed to come close to retaining the scale of its armed forces (and then only in some areas) because underlying real budget growth over the corresponding period averaged 2.6% p.a. compared to 1.35% p.a. in the United States.

Figure 1: Average US Navy cost per active duty vessel from 1951 to 2011

Source: US Pentagon Green Book and www.history.navy.mil

At least two factors contribute to what is often termed 'defence inflation';

- innovations are usually directed towards improving the performance of weapons systems rather than reducing cost due to the competitive 'winner takes all' nature of war
- defence forces remain stubbornly labour intensive, leaving them exposed to real labour cost escalation without offsetting labour productivity gains.

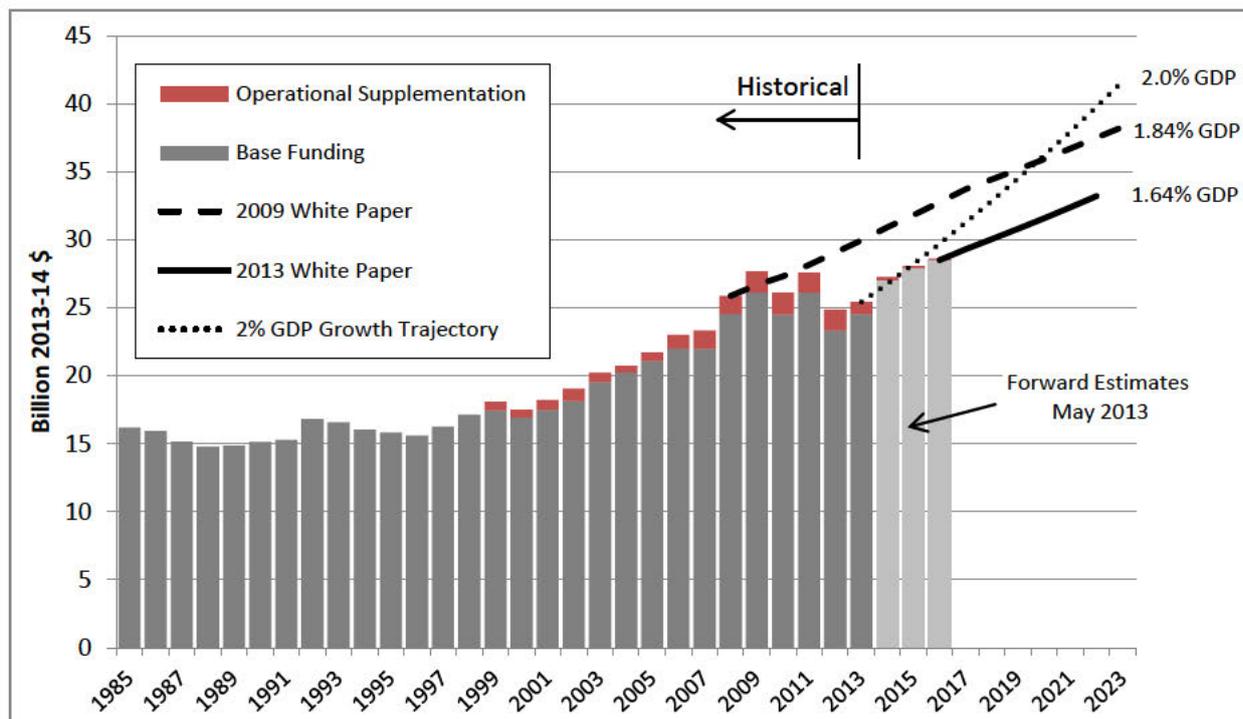
The increasing use of civil technologies in military applications may eventually moderate the growth in the cost of military capabilities, but strong countervailing factors are also at play. Rising costs and shrinking defence forces have led to smaller and less frequent production runs, resulting in reduced economies of scale. In addition, dwindling demand for military equipment has forced widespread industry consolidation, leading to less competition and more common monopoly supply arrangements. So it's hardly surprising therefore, that the cost of military capability continues to outpace inflation.

There is a critical conclusion to draw: all other things being equal, unless defence spending grows sufficiently rapidly, the size and/or quality of the defence force will decline. Australia's experience during the 1990s confirms this conclusion. After a decade when defence spending remained largely constant in real terms, the ADF was left with an equipment modernisation backlog, hollow capabilities, reduced preparedness for operations and fewer combat personnel—notwithstanding concerted efforts to boost efficiency through outsourcing and reorganisation over the period.

The fiscal impact of defence spending

A proper understanding of the fiscal demands that Defence might place on the budget requires an understanding of the nexus between defence funding and plans for the development of the ADF in recent times. The essential features of the story are contained in Figure 2, which plots actual defence spending from 1990 until 2013, and prospective funding trajectories out to 2023 based on various policy settings.

Figure 2: Recent and prospective Australian Defence Spending



Source: ASPI analysis

As already mentioned, static funding through the 1990s saw the ADF diminish in size and decline in relative technical sophistication. Events in East Timor in 1999 encouraged the Howard government to halt the decline and launch a program of recapitalisation and modest expansion of the ADF. Backed with a promise of 3% real growth until 2010, the 2000 Defence White Paper heralded nearly a decade of rebuilding for the ADF, supported by healthy tax revenues and propelled by deployments to Afghanistan, Iraq, East Timor and Solomon Islands. Between 2000 and 2010 the strength of the ADF grew from 50,355 to 59,084 personnel while the civilian workforce expanded from 16,292 to 20,648 (peaking at 21,818 in 2011). At the same time, the government made major investments in a range of platforms (some by replacement and some entirely new) that have recently or will soon enter service.

The Rudd government initially sought to continue the momentum, and in 2008 it promised to maintain 3% real growth in defence funding out to 2017. Even the onset of the global financial crisis in late 2008 failed to curb the then government's ambitions for the ADF. In fact, the 2009 Defence White Paper retained all the long-term goals that had emerged under the Howard government and added new aspirations for an even stronger Navy, including plans for doubling the submarine force from six to twelve boats. To fund this ever-expanding

vision for the ADF, the 2009 Defence White Paper reaffirmed the promise of 3% real growth to 2017 and added the commitment to 2.2% real growth out to 2030.

Notwithstanding its 21-year funding commitment, it's doubtful that there was ever going to be enough money to fund the ambitions of the 2009 Defence White Paper's. In any case, the question quickly became academic when fiscal reality set in. Within two weeks of the release of the 2009 White Paper, the May budget saw \$8.8 billion of promised funding deferred to beyond 2016. That turned out to be only the start; from 2009 to 2012 around \$20 billion of promised defence funding was either withdrawn or deferred in a failed attempt to deliver a fiscal surplus in 2012-13.

The Gillard government's 2013 Defence White Paper exacerbated the problem. It retained just about all the capability aspirations of its predecessor but provided substantially less funding, and then only out to 2022. For the period 2009 to 2022, the resulting shortfall compared with what was promised in 2009 amounts to around \$33 billion.

The shortfall between 2009 and 2013 was largely accommodated through cuts to the capital investment program, though austerity and efficiency improvements assisted somewhat. Critically, a conscious decision was taken by the government to retain military numbers notwithstanding a declining operational tempo over the period.

As things stood after the release of the 2013 White Paper, Defence was in an unsustainable situation with an unaffordable investment program, a directive to retain the size of its uniformed workforce, and steadily mounting additional costs due to the entry into service of major platforms purchased over the past decade. Examples include the F/A-18 Super Hornet fighters, the Boeing 737 AEW&C aircraft and the soon to be delivered Air Warfare Destroyers (AWD) and massive amphibious vessels.

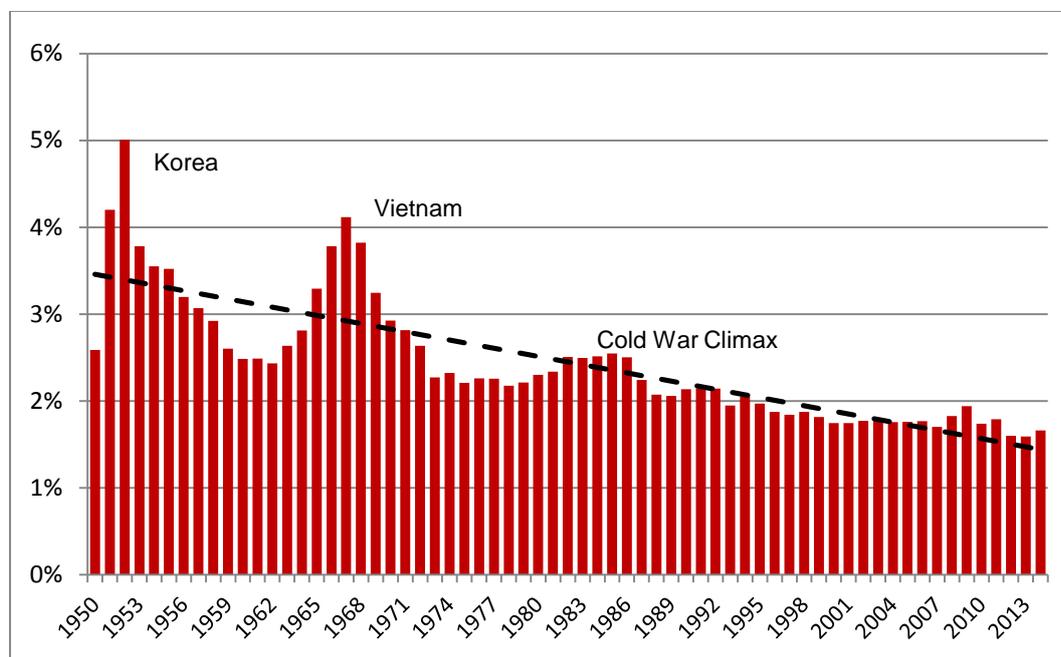
The current situation exemplifies the intrinsically long-term nature of acquiring and operating military equipment. Decisions made today about major acquisitions generate operating and personnel costs which might not arise for a decade but which could persist to mid-century. This feature of the defence enterprise demands robust planning backed up by reliable long-term funding to prevent waste and nugatory investment—a theme explored later in this submission.

The incoming government has promised to boost defence spending to 2% of GDP within the decade and also to deliver a new Defence White Paper in 2015. To put the 2% of GDP promise in perspective, defence spending today represents 1.6% of GDP. Under the 2013 White Paper it would have reached 1.65% in 2022, and under the 2009 White Paper it would have grown to 1.85% around that time. Australian defence spending has not consistently been above 2% of GDP since the start of the 1990s. Three points need to be made regarding the 2% promise. First, defence spending as a share of GDP has trended downwards over the past 60 years; see Figure 3. A similar trend can be observed for defence spending as a share of government outlays, with the trend amplified somewhat by the expansion of the share of GDP early in the period.

Second, a lesson from the 2000s is that Defence and defence industry can often struggle to absorb even modest increases in defence funding. Between 2003-04 and 2009-10, more than \$4.4 billion of investment funding was deferred into the future for the simple reason that

it couldn't be spent—at a time when underlying real growth in funding averaged only 3% a year. More hand backs would have occurred if not for last-minute 'opportunity purchases' of additional C-17 aircraft in 2011-12 and 2012-13 to soak up surplus cash.

Figure 3: Australian defence spending as a share of GDP, 1950 to 2013.



Thus, on past experience, steady growth promises the best prospects of success because it minimises the peak year-on-year growth required. Any attempt to ski-ramp spending towards the end of the decade will almost certainly fail due to the resulting compressed period of very rapid growth. But even steady growth would be demanding. To increase defence spending from 1.6% of GDP in 2013 to 2% of GDP in 2023 in a steady fashion will require real growth of around 5% p.a. based on the GDP growth rates for those years estimated in Treasury's 2010 Intergenerational Report.

Given the slow progress in initiating major projects over the past few years and the natural hiatus that will accompany the development of the 2015 White Paper, it is unclear whether it will prove feasible to boost defence spending to 2% of GDP within a decade. To put the challenge in perspective; to do so will require the defence budget to grow from \$25.4 billion today to \$41.7 billion in 2023 as measured in today's dollars, representing aggregate real growth of 64% (or an eye-watering 110% in nominal terms).

Third, the rationale for boosting defence spending to 2% of GDP remains unexplained. The 2% target emerged in the political debate as a rhetorical aspiration in recent years based on not much more the supposed 'NATO standard'—a benchmark honoured more in the breach than in the observance, with only 1 of the 26 non-American NATO members making it across the line as of 2011.

Of course, Australia is not a member of NATO and we should set our defence spending according to our own needs. More importantly, any *a priori* commitment to a given level of defence spending—be it expressed in dollars or GDP share—privileges financial inputs at

the expense of security outcomes. It may be that Australia's security demands 3% of GDP be spent on defence, or then again perhaps our security can be assured with only 1.5%.

Determining what is required to secure Australia's interests, and estimating what it will cost, should be the job of the 2015 Defence White Paper. If the government's promise on spending holds firm, the White Paper will degenerate into a taxpayer-funded shopping expedition up to the limit set by the 2% of GDP target. A more sensible approach would be for the government to use the White Paper process to consider options at various levels of spending and weigh the prospective strategic benefits of each against the financial costs.

Defence planning—the imperative for funding certainty

Over the past thirty years, Defence has stumbled from one budget crisis to the next—each time struggling to reconcile plans with funding. Two factors have caused this cyclic crisis.

First, Defence has persistently underestimated the actual cost of acquiring and maintaining capability. This has nothing to do with simple uncertainty, which would yield compensating over- and under-estimates across the portfolio which would average out to the actual aggregate cost. Rather, the systematic underestimation of costs represents a combination of optimism bias and the deliberate understatement of costs (by Defence and Industry alike) to make proposals more attractive and 'get them onto the books'. Estimates for the cost of the three vessel AWD project, for example, grew from a maximum \$4.5 billion in 2001 to \$8.1 billion at approval in 2007, and we now await the final bill as the project careens into deeper trouble by the day.

Second, governments have consistently failed to deliver the funding commitments upon which Defence formulates its plans. Of the five White Papers issued by Australian governments between 1976 and 2009, only the Howard government's 2000 White Paper fulfilled its funding promise (though its capability goals soon turned out to be unaffordable due to underestimates of the cost of acquiring and operating capability).

The recurring gap between funding and plans is wasteful and dangerous. Wasteful, because it prevents a realistic allocation of resources and results in relative over- and under-investment in particular capabilities depending upon when they arise in the cycle. And dangerous, because funding shortfalls can cause capabilities to be held past the point of military obsolescence or hollowed out to the point of uselessness. To prevent these problems from recurring, action is needed on both the supply and demand side of defence funding—the alternative is a continuation of the past pattern of waste and compromised defence capability.

On the supply side, the government needs to make a realistic commitment to long-term defence funding and stick to it. Whatever long-term fiscal plans emerge following the Commission of Audit, reasonable predictability in defence funding is essential if the pitfalls of the past are to be avoided.

On the demand side, the government should seek a strong assurance that the plans underpinning the 2015 Defence White Paper are robustly costed. The scale of the issue needs to be borne in mind. Assuming the next White Paper has a time horizon of 20 years, the financial cost could easily exceed half a trillion dollars in today's terms. Although

Defence's understanding of its current and future costs has arguably improved in recent years, there is so much at stake financially and strategically that the government should commission an independent audit of the affordability of the 2015 White Paper to run concurrent with its development.

Defence efficiency – reducing the cost of military capability

Opportunities exist for further efficiencies in Defence. But while these are worth pursuing, it should be borne in mind that the scale of savings is likely to be small compared with the cost of existing plans for the ADF.

1. Management and command overheads

Over the 2000s, the combination of high operational tempo and steady funding growth led to an expansion of management and command overheads in Defence. The most noticeable symptom has been the disproportionate growth in the number of senior executives and star-rank officers; see Table 1.

Table 1: Growth in command and management overheads in Defence

Category	2000	2013	Increase
Senior Executive Service	103	168	63.1%
Senior Officers (EL1 & EL2)	3,317	6,767	104.0%
Total Civilian Workforce	16,295	21,217	30.2%
Star-ranks Officers	120	190	58.3%
Senior Officers (O5 & O6)	1,415	2,042	44.3%
Total Military Workforce	50,355	58,253	15.7%

Source: Defence Annual Reports and Budget Papers

The most rapid growth in numbers has occurred at the Deputy/Associate Secretary level, where positions have grown from six in 1998-99 to 17 in 2013-14. Over the same period, 3-star officer positions have grown from four to six.

Senior executive and star-rank remuneration has also grown disproportionately to that received by those less senior. For example, over the period 2006 to 2012, military and civilian salaries for junior and middle ranking personnel increased by 25.1%, whereas 3-star military salaries increased by between 25.3% and 72.8% and deputy secretary salaries grew by between 27.6% and 116%.

From a fiscal perspective, the direct cost of additional senior executives and their more generous pay is immaterial. But the substantial flow-on effect on personnel costs across the organisation is not. The hierarchical nature of military and public service means that every additional senior executive requires a cascading pyramid of positions at subordinate positions to justify the topmost role. So when a person at the top steps up, a great many people below also take a step up the rank ladder. The result is widespread classification creep involving thousands of positions. As an example, Table 1 shows the extraordinary growth in the number of middle-ranking civilian and military 'senior officers' since 2000. Of course there's nothing unique about the growth of overheads in Defence; similar trends occurred elsewhere in the Public Service during the halcyon years of expanding government revenues—but that doesn't mean the taxpayer should continue to foot the bill.

While consulting firms stand ready to reengineer departmental processes to produce a leaner organisation, the resulting melee of special pleading and internal politicking would

yield an uncertain and probably half-hearted result. A more expeditious approach would be to take the following two steps:

- i. Return the top-structure of Defence to something like it was in the late 1990s and continue the process down through the hierarchy.
- ii. Cut 20% of funding and personnel from all headquarters and policy functions across the organisation (which is what the Pentagon is doing in light of sequestration).

2. Organisational structure and the Defence business model

Defence operates under a 'shared services' arrangement established in the late 1990s, whereby the three services depend heavily upon support provided by other parts of Defence. Information technology, financial services, facilities maintenance, base support, corporate services, non-materiel procurement and a range of personnel services are provided by shared service providers under the (misleadingly named) Chief Operating Officer (COO). Materiel acquisition and sustainment services are provided by the Defence Materiel Organisation (DMO) under a separate shared services arrangement.

The strength of the shared services model is that it delivers economies of scale/scope and allows the pooling of sparsely available specialist expertise. Just as importantly, it provides central control of service standards so that services can be rationed and costs constrained. The downside is that shared services arrangements deprive the military of direct control of the inputs they need to deliver military capability—potentially eroding the extent to which they can be held to account for what they are supposed to be delivering.

A perennial question has been whether the shared services should be broken up and activities returned to the single services to manage. Five years ago, the argument for abandoning the shared services model was perhaps plausible, but developments over the intervening period have swung the judgement firmly in favour of retaining the present arrangement. Not only have worthwhile efficiencies been achieved from the current arrangement, but the relationship between the shared service providers and their military customers has matured significantly.

Further efficiencies from the shared service model are possible, including through the refinement of business process, better use of information technology, and the packaging of activities for outsourcing (see below).

3. The efficient use of labour

Although the recent public debate has centred on reducing the number of civilian personnel in Defence, it makes absolutely no sense to quarantine military positions—especially at middle and senior ranks. Civilian personnel are substantially cheaper than uniformed personnel—the *average* unit cost of military personnel is 30% greater than for civilian personnel once the cost of housing, health care and other benefits are taken into account. And this understates the actual savings from a one-for-one substitution because of the far greater proportion of junior personnel in the services.

It follows that administrative, policy and technical roles should be filled by civilians wherever practical. Of course, if the decision is made to fix the number of military personnel rather than focus on the cost-effective delivery of military capability—as government are wont to do—a different approach would be necessary. Then it would make sense to assign such roles to military personnel outright, especially in situations where the military presently duplicates ostensibly centralised activities or where military personnel monitor the delivery of shared services.

No discussion of workforce efficiency in the public sector would be complete without mentioning the limitations imposed by the Public Service Act and the culture it engenders. Suffice to say that the present framework inhibits effective accountability and provides few options for driving superior performance or for managing underperformance.

4. Defence Materiel Organisation (DMO)

No part of Defence attracts more public attention with regard to performance and efficiency than DMO. There are two key points to keep in mind regarding DMO efficiency:

- Attempts to benchmark the size of the DMO workforce through comparison with its foreign counterparts on a 'per dollar' or 'per activity' basis are pointless. Apart from the very different portfolios of activities undertaken by different countries (including greater and lesser levels of developmental work), there are also different demarcations between the support/acquisition agency and the private sector on the one hand, and between the support/acquisition agency and the military on the other.
- Some of the harshest criticisms of DMO come from defence industry. Complaints centre on unnecessarily complex tendering and contracting, time-consuming processes and an unwillingness to enter into cooperative partnering arrangements. While there are certainly lessons to be learnt from industry about DMO and opportunities for improvement, it would be a grievous error to measure DMO's performance on the basis of how pleasant a day at the office it provides for its contractual counterparties.

Acquisition

DMO is currently managing 180 acquisition projects valued in excess of \$40 billion. As a rule, DMO delivers projects within budget but behind schedule. In recent times, however, schedule outcomes have improved. This is likely a result of ongoing reforms within DMO coupled with a greater number of off-the-shelf purchases. Although it's hard to be definitive about the relative importance of these two factors, it should be borne in mind that delays to projects are almost always the simple result of industry failing to deliver—and there's little in the reforms to DMO that would have increased their ability to drive industry performance.

The essential point is this: the key determinant of DMO's performance is the nature of the projects delivered to it by Defence's Capability Development Group. By definition, the schedule performance of a portfolio of projects will depend directly on the level of risk carried by the projects. Consequently, while there is every reason to continue to refine DMO processes and boost the acumen of its workforce, the only sure way to avoid problems with

major defence acquisitions is to acquire proven off-the-shelf systems from established production lines.

Sustainment

DMO manages more than 100 separate sustainment activities at an annual cost of \$5.6 billion. Sustainment probably accounts for 70% of the 7,000 strong DMO workforce. There are two key questions about the DMO's provision of materiel sustainment services to the ADF. First, does the shared services model work when it comes to something as integral to military capability as the sustainment of weapons systems? Second, is there scope for further efficiencies in materiel sustainment?

Problems with the shared services delivery of sustainment were brought into stark relief in early 2011 by the unexpected failure of the Navy's amphibious fleet on the eve of a cyclone hitting northern Queensland. Among a host of shortcomings exposed, it was clear that neither Navy nor DMO had been taking full responsibility for the material state of the vessels, thereby allowing a critical ADF capability to 'fall between the gaps'. Steps to clarify responsibility and remediate other problems have since been taken—including in the long-problematic Collins class submarine fleet. Critically, the military are now much more intimately involved in decisions about the sustainment services they receive from DMO.

Throughout much of the 2000s, DMO was effectively directly funded for sustainment rather than through the services. An important step in closing the gap between DMO and the military has been to give the services control over their sustainment budgets. Doing so has focused the military's attention on the services they receive, while also creating a vehicle to capture efficiency. DMO now works with its military customers and industry suppliers to understand the drivers of sustainment costs and to shape demand for support services accordingly. This three-way dialogue has allowed the cost of some sustainment activities to be reduced. Importantly, if a more cost-effective approach is found, the military get to redirect the savings to other areas. Given the maturity of the present arrangement and the economies of scale and scope inherent in DMO, the argument for devolving responsibility for sustainment back to the individual services is weak.

Still further opportunities for efficiency exist through reductions in size of the DMO sustainment workforce—principally through the use of performance-based contracts. At present, many fleets are maintained on a 'transactional' basis, whereby DMO contracts specific maintenance services from industry. By its very nature, a transactional approach requires a substantial in-house team to define and oversee work. In other areas, industry takes responsibility for maintaining assets at a particular level of availability via a performance-based contract. Performance based contracts reduce transaction costs and would allow DMO to operate with fewer in-house personnel. As legacy weapons systems leave service, the opportunity to employ performance-based contracts will grow and DMO should reduce in size.

Status of DMO

Since 2005, DMO has been constituted as a prescribed agency, subordinate to Defence but with its own financial accounts. The goal of re-establishing DMO in this form was to enable it to develop a more commercially orientated culture and allow it more flexibility in managing its

workforce. Although some progress has been made on both fronts, it would arguably have occurred irrespective of DMO's quasi-independence from the remainder of Defence. What's more, the myriad of formal accounting transactions that now arise between Defence and DMO yield no visible benefit. Little would be lost by reabsorbing DMO into Defence.

Of more interest, and potentially greater consequence, is the proposition to move DMO further away from Defence by reconstituting it as a Government Owned Privately Operated (GOCO) enterprise along the lines presently under close consideration in the United Kingdom.

Re-establishing DMO as a GOCO would allow the new organisation to employ people under private sector arrangements, including private sector style incentives and sanctions. But while this would certainly boost the commercial acumen of the workforce, it would inevitably introduce a substantial new layer of transaction costs between Defence and DMO's replacement. Even if this option were to be judged to be worthwhile on balance—and that's far from clear—it makes sense to await the results of the United Kingdom's initiative before acting.

5. *Outsourcing*

A great many activities were outsourced from Defence in the 1990s and early 2000s, resulting in thousands fewer civilian and military personnel. As a result, private sector support to Defence is pervasive and the remaining opportunities within Defence are somewhat limited.

Some 'back office' functions such as payroll, credit card services and accounts payable/receivable could be outsourced. Although the scale of savings would not be large, it would help Defence concentrate on its core business. As things stand, some work would need to be done to 'package' activities before going to market.

Rather than consider these sorts of transactional services in a purely Defence context, the Commission could usefully examine the possibility of generating greater economies of scale by consolidating similar functions across government. A precedent exists with Defence providing security vetting services to a range other agencies. There are likely to be similar opportunities where it would be natural and efficient for a single agency to take the lead in the provision of a service across government—for example salary payments—with or without subsequent outsourcing.

In recent years, the role of the private sector in supporting Defence's information technology networks has grown and delivered efficiency gains. It's difficult to judge how much more can be done from the outside, but it's clear that at least some potential areas of private sector involvement remain untouched. For example, could the private sector provide some of Defence's management information systems—such as personnel and finances—as an end-to-end service?

On the military side, greater reliance on private sector support for deployed operations (as occurs in the UK and US) could deliver savings by reducing the uniformed workforce, but might be strongly resisted by the Services.

6. Naval shipbuilding

The bulk of the ADF's equipment comes from overseas, including almost all of its high-tech weapons systems. A key exception is naval shipbuilding where multibillion-dollar domestic projects are both underway and in planning, including the \$8 billion Air Warfare Destroyer (AWD) project, the \$3 billion amphibious ship project, and the future replacements of the Collins class submarines and Anzac class frigates at a cost of multiple tens of billions of dollars.

Unfortunately, problems abound in the sector. The AWD project is performing poorly, the sustainment of the Collins class submarines is problematic (although apparently improving), and the long-term viability of some existing shipyards is questionable.

Defence plays the role of both customer and *de facto* regulator of the sector through its monopsony power. This dual role is problematic. Defence cannot be expected to take a dispassionate view of matters when it is counterparty in vexed multibillion-dollar contracts with the firms it oversees. Moreover, there is no reason to think that arrangements that are convenient to Defence are necessarily the most efficient for the taxpayer.

Setting aside Defence's conflicted role as customer and regulator, it has also struggled to effectively deal with the issues at hand. Defence's attempt to chart a way ahead for the sector in its *Future Submarine Industry Skilling Plan: A Plan for the Naval Shipbuilding Industry* released in mid-2013 was incomplete and analytically flawed. To make matters worse, firms in the naval construction sector and their state government proxies are mounting well-resourced lobbying efforts—often involving retired high-ranking ADF officers—to shape government policy consistent with their business interests.

With massive future naval programs now taking form, critical decisions that will determine the long-term efficiency of the sector are looming. Given how deeply Defence is entangled in the issues, an independent external review of the naval construction sector is essential if the taxpayer's interests are to be protected. Issues to be resolved include: the costs and benefits of local construction, the ownership of ASC Ltd, the contracting strategies to be employed on future naval projects, the potential commercial and geographical rationalisation of the domestic naval construction sector, and the possibility of adopting a long-term 'continuous build' strategy for ships and submarines.

7. Defence Estate

The dispersed geographic footprint of the ADF imposes additional costs through foregone economies of scale and elevated personnel costs associated with more frequent posting relocations (not to mention the personal disruption incurred by members and their families). Unfortunately, the capital investment needed to close a base and relocate facilities will often result in a very long payback period even at a zero discount rate for future cash flows. Nonetheless, options for reducing the geographic dispersion of the ADF consistent with strategic imperative should be sought and judged on their financial merits.

Defence efficiency—having the right military capabilities

Decisions about the make-up of the ADF in terms of ships, planes and troops are absolutely critical to Australia's security. As a small nation we cannot afford to waste money on

unnecessary or ineffective capabilities. In a perfect world, the overall structure of the ADF would be suitable for achieving the government's strategic goals (i.e. it would be effective), and specific capabilities would reflect an appropriate balance between the costs, risks and benefits of alternative options (i.e. they would be cost-effective). On neither count is there reason for confidence.

Despite a showcase of labyrinthine internal processes within Defence, the resulting structure of the ADF reflects little more than the historical shape of the ADF and the aggregation of the ambitions of the individual services. Consistent with this, successive Defence White Papers have increasingly failed to establish a connection between declared strategy and the shape of the ADF. And while some progress has been made in vetting individual proposals, more could be done to bolster the internal scrutiny of the multi-billion dollar equipment investment program. Regrettably, scrutiny by the central agencies of government is neutered by the highly specialised nature of military equipment and limited information sharing by Defence.

Decisions about the shape of ADF could be improved in a couple of ways. First, internal analysis and contestability of capability development decisions within Defence could be bolstered. Indeed, and as a general observation, Defence suffers from being a federated organisation with insufficient central control and inadequate analytic capacity.

Second, greater transparency prior to decisions would allow informed public debate. In stark contrast to other areas of government policy, multibillion-dollar defence decisions are routinely sprung upon the public with little or no warning.

Realistically, however, such moves would only partially moderate the military's sway over decisions; ultimately only close and diligent oversight by the government itself can change the situation. Only the government has the power to override the military's preferences. In this regard, the forthcoming White Paper is a timely opportunity.

The challenge of defence reform

Since at least the late 1980s, Defence has been subject to frequent and deep reform. Critical stages included the Commercial Support Program of the 1990s, which saw thousands of positions outsourced, and the 1997 Defence Reform Program, which accelerated outsourcing and created the shared services framework under which Defence now operates. Most recently, the 2009 Strategic Reform Program (SRP) sought to generate around \$21 billion in savings over a decade.

Remarkably, little has been done to track the actual financial outcomes of historical reform programs. So while it's almost certain that efficiency has improved over time, the extent of gains is impossible to quantify (though it's likely been less than the massive figures claimed at the start of programs).

Although some efficiency generating reform continues in DMO and other shared service areas of Defence, the momentum of the SRP has been lost since 2012—mainly because the substantial cuts to defence funding between 2009 and 2012 forced the department to switch from a focus on productivity enhancing initiatives to the management of acute austerity.

It is hardly a great loss. The scale of savings envisaged by the SRP was vastly overstated through the use of exaggerated business-as-usual cost baselines. For example, a large

share of original SRP personnel reductions were claimed relative to a counterfactual growing personnel projection. On the whole, the SRP was a modest program that sought to do sensible things yet claimed savings similar in scale to those associated with the much more fundamental and disruptive 1997 DRP.

With a root and branch review of Defence planned in tandem with the White Paper, a new round of reform is now on the cards. With most of the possibilities for outsourcing already taken, the opportunities of the 1990s cannot be repeated. Nonetheless, bringing together the ideas explored above yields a sensible and worthwhile program, key elements of which would be:

- return the top-structure of Defence to something like it was in the late 1990s and continue the process down through the hierarchy
- cut 20% of funding and personnel (military and civilian) from all headquarters and policy functions across the organisation
- continue reform of sustainment activities and accelerate the adoption of performance based contracts where practical
- continue to improve the efficiency of non-material shared services through investment in better IT systems, tighter central control of service levels, and the packaging and outsourcing of those remaining activities for which a business case can be made
- chart a way ahead for the multibillion-dollar naval shipbuilding sector through an independent external review involving commercial expertise from, for example, the resources sector
- examine the business case for estate rationalisation
- use the 2015 White Paper to ensure that plans for the ADF represent a coherent and effective strategy for protecting Australia's interests in the 21st century
- ensure the financial affordability of the 2015 Defence White Paper through an independent audit run concurrent with its development.

ASPI stands ready to support the work of the Commission in any way possible, including by providing more detailed information and undertaking further analysis.

Sources and further reading

An overview of the challenges facing [Defence appears in Agenda for Change: strategic choices for the next government](#) (ASPI 2013).

The economics of defence capability are explored further in [Trends in US defence spending: implications for Australia](#) (Thomson 2010) and [Strategic Choices: Defending Australia in the 21st Century](#) (Davies and Thomson 2008).

Analysis of recent Australian defence funding can be found in [The Cost of Defence: ASPI Defence Budget Brief 2013-14](#), see especially Chapter 3 (Thomson 2013) A more detailed analysis of earlier years is available in prior editions going back to 2002-03.

Defence efficiency is examined in Chapter 4 of [The Cost of Defence: ASPI Defence Budget Brief 2010-11](#) (Ergas 2010) and [More Guns Without Less Butter: Improving Australian Defence Efficiency](#) (Ergas and Thomson, 2011).

The Defence business model and related issues are examined in [Serving Australia: Control and administration of the Department of Defence](#) (Thomson 2011).

An overview of recent reviews of Defence appears in [Australia's Defence: A Review of the 'Reviews'](#) (Ergas 2012) and a historical account of [Defence reform can be found in Defence Reform: The Australian Experience](#) (Thomson 2013). Detailed analysis of the Strategic Reform Program can be found in the ASPI Defence Budget Briefs published in [2009](#), [2010](#), [2011](#), [2012](#) and [2013](#).

A critical analysis of Australian Naval Shipbuilding can be found in Chapter 7 of [The Cost of Defence: ASPI Defence Budget Brief 2013-14](#) (Thomson 2013), see also [A folly of strategic proportions](#), [In the market for a naval shipbuilding plan](#), [The Air Warfare Destroyer project—how effective is the alliance model?](#)

The relative advantages of off-the-shelf purchasing versus development projects is explored in [We'll have six of them and four of those](#) (Davies and Layton, 2009) and [Three views of risk](#) (Davies, Thomson and Jenkins, 2011).

Recent major external reviews of Defence relevant to efficiency include:

[2008 Audit of the Defence Budget](#) (Pappas 2008)

[Plan to Reform Support Ship Repair and Management Practices](#) (Risso 2011)

[Review of the Defence Accountability Framework](#) (Black 2011)

[Reviews of Submarine Sustainment](#) (Coles 2012)